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A two-phase and diffusion transport model for the migration of high-density organic liquids in heterogeneous aquifers

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Abstract

A new mathematical model describing the migration of high-density organic liquids in heterogeneous aquifers is presented. The model consists of interconnected equations of two-phase filtration and diffusion at the interface of the two liquids. The features of the different cases of pollutant migration are analyzed on the basis of computer simulation.